Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) A communication device ~~for realizing communication with data distributed to a plurality of connections~~, comprising:

a memory; and

a processor,

wherein the processor is configured to execute instructions stored in the memory to ~~a function of storing~~ divide original data into a plurality of blocks, and store information within a header for restoring the plurality of blocks to the original data ~~distributed to the plurality of connections within a header of said data~~.

2. (Currently amended) The communication device according to claim 1, wherein ~~said header is a connection header~~ the information for restoring the plurality of blocks to the original data is stored in an option field within the header of the transport protocol.

3. (Currently amended) The communication device according to claim 1, wherein the processor is further configured to execute instructions to examine ~~which has a function of examining~~ maximum values of a packet size allowed by a connection related to communication and ~~unifying~~ unify the smallest size among said packet size maximum values as a maximum value of an allowable packet size.

4. (Currently amended) The communication device according to claim 1, wherein the processor is further configured to execute instructions to examine ~~which has a function of examining~~ maximum values of a packet size allowed by a connection related to communication and ~~communicating~~ communicate with a packet size equal to or less than the smallest size among said packet size maximum values.

5. (Currently amended) The communication device according to claim 1, wherein ~~as information for restoring said data,~~ a data length is stored as information for restoring said original data.

6. (Currently amended) A communication device ~~for realizing communication with data distributed to a plurality of connections by using a connection by a transport protocol equivalent to OSI four layers including TCP, SCTP, UDP and DCCP~~, comprising:

a memory; and

a processor,

wherein the processor is configured to execute instructions stored in the memory to receive a plurality of blocks and, based on information stored within a header, restore the plurality of blocks to original data ~~a function of storing information for restoring data distributed to the plurality of connections within a header equal to or less than equivalence of four layers including TCP, SCTP, UDP and DCCP~~.

7. (Currently amended) The communication device according to claim 6, wherein the ~~information for restoring data distributed to the plurality of connections is stored within the~~ header is a header of the transport protocol.

8. (Currently amended) The communication device according to claim 6, wherein the information stored within the header ~~for restoring data distributed to the plurality of connections~~ is stored in an option field ~~within~~ of the header ~~of the transport protocol~~.

9. (Currently amended) The communication device according to claim 6, wherein the information stored within the header ~~for restoring data distributed to the plurality of connections~~ is stored in a part of a timestamp field of an option field within the header ~~of the transport protocol~~.

10. (Currently amended) The communication device according to claim 1, wherein ~~information for restoring data distributed to the plurality of connections is stored within~~ the header is an IP header.

11. (Currently amended) The communication device according to claim 1, wherein information for restoring the plurality of blocks to the original data ~~distributed to the plurality of connections~~ is stored in a fragment field within an IP header.

12. (Currently amended) The communication device according to claim 6, wherein the processor is configured to execute instructions stored in the memory to examine ~~which has a function of examining an~~ a Maximum Transfer Unit (MTU) usable by the plurality of connections by a path MTU discovery option and ~~unifying~~ unify MTU of the respective connections to the smallest MTU obtained by said examination.

13. (Currently amended) The communication device according to claim 6, wherein the processor is configured to execute instructions stored in the memory to refer ~~a transmission side stores a distributed data length in said information for restoring said distributed data and a reception side refers~~ to ~~said~~ a data length to restore the plurality of blocks to the original data ~~restore the data~~.

14. (Currently amended) The communication device according to claim 1, wherein the processor is further configured to execute instructions to transfer the plurality of blocks based on ~~a data size to be transferred to each connection at one time is changed according to~~ a communication rate.

15. (Currently amended) The communication device according to claim 1, wherein the original data is configured to be restored by referring to the information for restoring the plurality of blocks to the original data within the header.

16. (Currently amended) The communication device according to claim 1, ~~which has a function of, when a TCP communication rate is low, reducing~~ wherein the processor is further configured to execute instructions to reduce ~~the~~ a volume of data to be transferred ~~to each connection at one time~~ when a TCP communication rate is low, and increase ~~and when the TCP communication rate becomes high, increasing~~ the volume of data to be transferred ~~to each connection at one time~~ when the TCP communication rate becomes high.

17. (Currently amended) A ~~communication~~ method ~~for realizing communication with data distributed to a plurality of connections, comprising the step of~~, comprising:

using a communication device to:

divide original data into a plurality of blocks; and

store information within a header for restoring the plurality of blocks to the original data.

~~processing of storing information for restoring data distributed to the plurality of connections within a header of data.~~

18. (Currently amended) The ~~communication~~ method according to claim 17, wherein ~~said header is a connection header~~ the information for restoring the plurality of blocks to the original data is stored in an option field within the header of the transport protocol.

19. (Currently amended) The ~~communication~~ method according to claim 17, ~~comprising processing of examining~~ further comprising using the communication device to examine maximum values of a packet size allowed by a connection related to communication and ~~unifying~~ unify the smallest size among said packet size maximum values as a maximum value of an allowable packet size.

20. (Currently amended) The ~~communication~~ method according to claim 17, ~~comprising processing of examining~~ further comprising using the communication device to examine maximum values of a packet size allowed by a connection related to communication and communicate ~~communicating~~ with a packet size equal to or less than the smallest size among said packet size maximum values.

21. (Currently amended) The ~~communication~~ method according to claim 17, wherein ~~as the information for restoring data,~~ a data length is stored as the information for restoring said original data,.

22. (Currently amended) A ~~communication~~ method, ~~for realizing communication with data distributed to a plurality of connections by using a connection by a transport protocol equivalent to OSI four layers including TCP, SCTP, UDP and DCCP, comprising the step of~~ comprising:

using a communication device to:

execute instructions stored in the memory to receive a plurality of blocks and, based on information stored within a header, restore the plurality of blocks to original data.

~~processing of storing information for restoring data distributed to the plurality of connections within a header equal to or less than equivalence of four layers including TCP, SCTP, UDP and DCCP.~~

23. (Currently amended) The ~~communication~~ method according to claim 22, wherein the ~~information for restoring data distributed to the plurality of connections is stored within the~~ header is a header of the transport protocol.

24. (Currently amended) The ~~communication~~ method according to claim 22, wherein the information stored within the header ~~for restoring data distributed to the plurality of connections~~ is stored in an option field ~~within~~ of the header ~~of the transport protocol~~.

25. (Currently amended) The ~~communication~~ method according to claim 22, wherein the information stored within the header ~~for restoring data distributed to the plurality of connections~~ is stored in a part of a timestamp field of an option field within the header ~~of the transport protocol~~.

26. (Currently amended) The ~~communication~~ method according to claim 17, wherein the header ~~information for restoring data distributed to the plurality of connections~~ is ~~stored within~~ an IP header.

27. (Currently amended) The ~~communication~~ method according to claim 17, wherein the information for restoring the plurality of blocks to the original ~~data distributed to the plurality of connections~~ is stored in a fragment field within an IP header.

28. (Currently amended) The ~~communication~~ method according to claim 22, further comprising using the communication device to examine ~~comprising processing of examining~~ an MTU usable by the plurality of connections by a path MTU discovery option and ~~unifying~~ unify MTU of the respective connections to the smallest MTU obtained by said examination.

29. (Currently amended) The ~~communication~~ method according to claim 22, further comprising using the communication device to refer to a data length to ~~wherein a transmission side stores a distributed data length in the information for restoring distributed~~

~~data and a reception side refers to said distributed data to~~ restore the plurality of blocks to the original data.

30. (Currently amended) The ~~communication~~ method according to claim 17, further comprising using the communication device to transfer the plurality of blocks based on ~~comprising processing of changing a data size to be transferred to each connection at one time according to~~ a communication rate.

31. (Currently amended) The ~~communication~~ method according to claim 17, wherein the original data is configured to be restored ~~comprising processing of restoring data~~ by referring to the information for restoring the plurality of blocks to the original data within the header.

32. (Currently amended) The ~~communication~~ method according to claim 17, further comprising using the communication device to reduce ~~comprising processing of, when a TCP communication rate is low, reducing the~~ a volume of data to be transferred ~~to each connection at one time~~ when a TCP communication rate is low, and increase ~~when the TCP communication rate becomes high, increasing~~ the volume of data to be transferred to each connection at one time when the TCP communication rate becomes high.

33. (Currently amended) A computer program product embodied on a computer-readable storage medium ~~which operates on a computer for executing communication with data distributed to a plurality of connections~~, comprising ~~the function of~~:

computer code for dividing original data into a plurality of blocks; and

computer code for storing information within a header for restoring the plurality of blocks to the original data.

~~executing processing for storing information for restoring data distributed to the plurality of connections within a header of said data~~.

34. (Currently amended) The computer program product according to claim 33, ~~wherein said header is a connection header~~ the information for restoring the plurality of

blocks to the original data is stored in an option field within the header of the transport protocol.

35. (Currently amended) The computer program product according to claim 33, ~~which causes execution of the function of examining~~ further comprising computer code for examining maximum values of a packet size allowed by a connection related to communication and comprising computer code for unifying the smallest size among said packet size maximum values as a maximum value of an allowable packet size.

36. (Currently amended) The computer program product according to claim 33, ~~which causes execution of the function of examining~~ further comprising computer code for examining maximum values of a packet size allowed by a connection related to communication and comprising computer code for communicating with a packet size equal to or less than the smallest size among said packet size maximum values.

37. (Currently amended) The computer program product according to claim 33, ~~which causes execution of the function of~~ further comprising computer code for storing a data length as the information for restoring said original data.

38. (Currently amended) A computer program product embodied on a computer-readable storage medium ~~which operates on a computer for executing communication with data distributed to a plurality of connections by using a connection by a transport protocol equivalent to OSI four layers including TCP, SCTP, UDP and DCCP~~, comprising ~~the function of~~:

computer code for receiving a plurality of blocks and, based on information stored within a header; and

computer code for restoring the plurality of blocks to original data

~~executing processing for storing information for restoring data distributed to the plurality of connections within a header equal to or less than equivalence of four layers including TCP, SCTP, UDP and DCCP~~.

39. (Currently amended) The computer program product according to claim 38, ~~which causes execution of the function of storing the information for restoring data~~

~~distributed to the plurality of connections within the~~ wherein the header is a header of the transport protocol.

40. (Currently amended) The computer program product according to claim 38, ~~which causes execution of the function of storing the information for restoring data distributed to the plurality of connections in~~ wherein the information stored within the header is stored within an option field within the header ~~of the transport protocol~~.

41. (Currently amended) The computer program product according to claim 38, ~~which causes execution of the function of storing the information for restoring data distributed to the plurality of connections~~ wherein the information stored within the header is stored in a part of a timestamp field of an option field within the header ~~of the transport protocol~~.

42. (Currently amended) The computer program product according to claim 33, ~~which causes execution of the function of storing the information for restoring data distributed to the plurality of connections within~~ wherein the header is an IP header.

43. (Currently amended) The computer program product according to claim 33, ~~which causes execution of the function of storing the information for restoring data distributed to the plurality of connections~~ wherein information for restoring the plurality of blocks to the original data is stored in a fragment field within an IP header.

44. (Currently amended) The computer program product according to claim 38, further comprising computer code for ~~which causes execution of the function of~~ examining an MTU usable by the plurality of connections by a path MTU discovery option and computer code for unifying MTU of the respective connections to the smallest MTU obtained by said examination.

45. (Currently amended) The computer program product according to claim 38, ~~which causes a transmission side to execute the function of~~ further comprising computer code for ~~storing a distributed data length in the information for restoring distributed data and a~~

~~reception side to execute the function of~~ referring to ~~said distributed~~ a data length to restore the plurality of blocks to the original data.

46. (Currently amended) The computer program product according to claim 33, further comprising computer code for transferring the plurality of blocks based on ~~which causes execution of the function of changing a data size to be transferred to each connection at one time according to~~ a communication rate.

47. (Currently amended) The computer program product according to claim 33, further comprising computer code for ~~which causes execution of the function of~~ restoring the plurality of blocks to the original data by referring to the information within the header ~~for restoring data~~.

48. (Currently amended) The computer program product according to claim 33, further comprising computer code for ~~which causes execution of the function of, when a TCP communication rate is low,~~ reducing ~~the~~ a volume of data to be transferred when a TCP communication rate is low, ~~to each connection at one time~~ and ~~when the TCP communication rate becomes high,~~ increasing the volume of data to be transferred ~~to each connection at one time~~ when the TCP communication rate becomes high.

49. (Currently amended) The communication device according to claim 6, wherein the communication device receives the plurality of blocks at different communication rates ~~a data size to be transferred to each connection at one time is changed according to a communication rate~~.

50. (Currently amended) The communication device according to claim 6, wherein the communication device ~~data restored by referring to the information for restoring data~~ is a proxy server.

51. (Currently amended) The communication device according to claim 6, wherein ~~which has a function of, when a TCP communication rate is low, reducing the volume of data to be transferred to each connection at one time and when the TCP communication rate~~

~~becomes high, increasing the volume of data to be transferred to each connection at one time~~ the information stored within the header comprises a sequence number and a block size.

52. (Currently amended) The ~~communication~~ method according to claim 22, wherein the communication device receives the plurality of blocks at different communication rates ~~comprising processing of changing a data size to be transferred to each connection at one time according to a communication rate~~.

53. (Currently amended) The ~~communication~~ method according to claim 22, wherein the communication device is a proxy server ~~comprising processing of restoring data by referring to the information for restoring data~~.

54. (Currently amended) The ~~communication~~ method according to claim 22, wherein the information stored within the header comprises a sequence number and a block size ~~comprising processing of, when a TCP communication rate is low, reducing the volume of data to be transferred to each connection at one time and when the TCP communication rate becomes high, increasing the volume of data to be transferred to each connection at one time.~~

55. (Currently amended) The computer program product according to claim 38, wherein the plurality of blocks are received at different communication rates ~~which causes execution of the function of changing a data size to be transferred to each connection at one time according to a communication rate~~.

56. (Currently amended) The computer program product according to claim 38, wherein the computer-readable storage medium is a proxy server ~~which causes execution of the function of restoring data by referring to the information for restoring data~~.

57. (Currently amended) The computer program product according to claim 38, ~~which causes execution of the function of, when a TCP communication rate is low, reducing the volume of data to be transferred to each connection at one time and when the TCP communication rate becomes high, increasing the volume of data to be transferred to each connection at one time~~ wherein the information stored within the header comprises a sequence number and a block size .